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Collaborative monitoring in Dutch river management: Case study WaalSamen

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Introduction

The involvement of civil society in water management has increased over the past decades (Pahl-Wostl et al., 2010). Public participation in water management facilitates governmental organisations to include a variety of knowledge and skills with the intention to gain public support and to successfully implement policies (Bressers et al., 1994). Innes and Booher (2004) state that solving complex problems, as in water management, requires collaboration with stakeholders.

Previous literature provides numerous criteria for evaluating successful collaboration with stakeholders in water management. These criteria can be narrowed down to three core principles: trust, communication and learning. These three principles respectively promote a transparent process (Lee et al., 2010), clear goals and expectations (Broerse et al., 2009), and mutual understanding of each other's problems (Mostert et al., 2007).

In 2013 Rijkswaterstaat, the Dutch national water authority, initiated a project called 'Pilot Langsdammen type WaalSamen' (Eerden, 2013). The project entails the construction of innovative longitudinal training dams on a 10 km stretch of the river Waal, which is the first time these dams are built on such a large scale in the Netherlands. Therefore, the effects of this intervention need to be monitored closely.

The monitoring programme 'WaalSamen' is set up as a collaborative exercise, in which Rijkswaterstaat works together with research institutes and representative stakeholder organizations (Verbrugge et al., 2017). The idea behind this approach is to get an integral view of the different problems and values perceived by the different stakeholders in the project area. The monitoring activities focus on three main issues: ecological, technical and nautical effects. In addition, a perception study among the local community is performed

(Verbrugge et al., 2017). Each partner organisation is allowed to plan and execute its own monitoring activities, but this has to be in consultation with the other partners.

This study presents the results of a mid-term evaluation study on the collaborative monitoring programme 'WaalSamen'. The aim of this study was to evaluate the collaborative process and the outcomes so far in order to support adaptive management. Additionally, the results formed the basis for an advisory report for Rijkswaterstaat about collaboration with (local) stakeholder organisations.

Methods

We performed 15 in-depth, semi-structured interviews with people that are currently involved in the WaalSamen partnership (Table 1). The interviews consisted of four themes: the collaborative practices, communication, trust, and learning. In addition, partners were asked to list the strengths and weaknesses of WaalSamen. Interview transcripts were analysed using descriptive and axial coding methods (Saldana, 2009). In addition, the principal investigator attended one partnership meeting to make observational notes. These were used to assess group dynamics and to see whether problems raised in the interviews were also shared within the group.

Table 1. Information on and number of interviewees.

Partner	Organisation	#
Research	Deltares	2
	Radboud University	2
	TU Delft	2
	Wageningen UR	2
Societal	Regional Angling Federation	1
	Royal BLN-Schuttevaer	1
	The Royal Dutch Angling Association	1
Government	Rijkswaterstaat Oost Nederland	4

Results

Overall, all interviewees had positive experiences with collaborating in WaalSamen. The results reiterate the importance of trust, communication and learning as core principles for collaboration. The most often recognized strengths of WaalSamen were:

- Different disciplines with different perspectives working together
- Mutual understanding of problems, viewpoints and backgrounds
- Listening to and respecting each other creates pleasant interactions

One of the researchers about WaalSamen: *"The most special feature of WaalSamen is that we work together with partners that we normally don't work with, based on equality. Everyone is strongly involved in the monitoring. I haven't seen this in any other project, and I think it is an important strength."*

Despite the positive evaluation, there were also some critical remarks. Nine partners worried about the future course of the monitoring programme, as they feel this is still unclear. A clear overview containing all of the monitoring activities was not available, but could be useful to improve clarity. Furthermore, five partners said that more intensive communication between the partners is needed to achieve more clarity on the programme's progress and future course. Communication and clarity on activities and goals are essential for trust building and collaboration (Broerse et al., 2009).

The need for communication is expressed by one of the researchers:

"We should think about the interaction between the monitoring groups. On this line of communication not much is happening. (...) I don't hear that much from Rijkswaterstaat. They are in the centre of the programme, so I expect them to notify us about the progress."

Implications for future participatory water management

Our research validates and highlights connections between the core principles identified in previous studies (Figure 1). The WaalSamen partnership was formed based on trust, which is strengthened by effective, transparent communication, facilitating learning processes. The arrows in figure 1 indicate that all three of these principles have the ability to

influence each other. They are all equally important for a partnership to succeed.

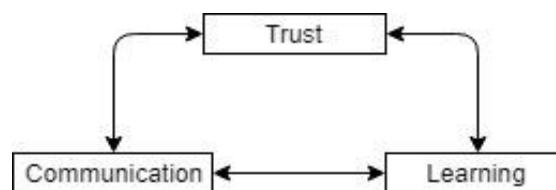


Figure 1. Three core principles for collaboration in water management and their interrelations.

The next challenge lies in finding ways to implement the core principles in water management practices at different scales. This starts with an awareness of the importance of these principles on the administrative level. Even though this importance might seem obvious to most people, actually working with the core principles and applying them proves to be challenging. Our recommendations to the Dutch national water authority are (1) to use case studies ('best practices') and (2) scenario exercises in training programmes for all employees working in collaborative programmes.

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